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EXAMINER	
AMINI, JAVID A	
ART UNIT	PAPER NUMBER
2672	

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/711,403	COX ET AL.
	Examiner	Art Unit
	Javid A Amini	2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,14-25 and 28-34* is/are rejected.

7)☒ Claim(s) *12,13,26 and 27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☒ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Arguments

Applicant's arguments, see amendment, filed May 9, 2003, with respect to the rejection(s)of claim(s) 1, 15 and 29 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chandhoke et al. and Sacerdoti.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 8, 9, 15-16, 18, 19, 21-23 and 28-29 rejected under 35 U.S.C. 102(e) as being anticipated by Chandhoke et al. US patent 2002/0191023 A1.

1. Claim 1.

Chandhoke et al. hereinafter, Chandhoke in (paragraphs 0136-0137 and 0123) teach the step of, "a display device, a display controller configured to display graphical images representative of tabular data and to permit a user to graphically edit the tabular data", that the user may also graphically edit the position and velocity profiles (tabular data) for the operation and view the changes caused to the property values. Chandhoke in (paragraph 0155) teach the step of, "a simulator configured to receive tabular data edited by a user employing the controller".

2. Claim 2.

Chandhoke in Fig. 6B teach the step of, "wherein the controller is configured to display the tabular data as a line chart", the tabular data as a line chart.

3. Claim 4.

Chandhoke in (page 1, para. 0008) teach the step of, "wherein the controller is configured to permit a user to edit the tabular data by adding a data display element", that the motion control prototyping environment may be designed to enable a user to easily and efficiently develop/prototype a motion control sequence without requiring the user to perform programming, e.g., without needing to write or construct code in any programming language.

4. Claim 5.

Chandhoke in Figs. 6D-6F teach the step of, "wherein the added data display element is a line within a line chart", a line within a line chart.

5. Claim 8.

Chandhoke in (paragraph 0123) teach the step of, "wherein the controller is configured to permit a user to edit the tabular data by selecting a data display element to edit".

6. Claim 9.

As for claim 9, "wherein the controller is configured to permit a user to edit the tabular data by selecting an editing function to be applied to the data display element" see rejection of claim 8.

7. Claim 15.

Chandhoke in (paragraphs 0136-0137 and 0123) teach the step of, "A method of interactively displaying tabular data comprising the steps of: (A) displaying graphical images representative of tabular data; and (B) accepting user input to graphically edit the tabular data", that the user may also graphically edit the position and velocity profiles (tabular data) for the operation and view

the changes caused to the property values. Chandhoke in (paragraph 0155) teach the step of, "performing a simulation using the graphically edited tabular data".

8. Claim 16.

As for claim 16, "wherein the step (A) of displaying graphical images representative of tabular data further comprises the step of: (A1) displaying the tabular data as a line chart", Chandhoke in Fig. 6B illustrate the tabular data as a line chart.

9. Claim 18.

Chandhoke in (page 1, para. 0008) teach, "wherein the step (B) of accepting user input to graphically edit the tabular data further comprises the step of: (B1 a) accepting input from a user to edit the tabular data by adding a data display element", that the motion control prototyping environment may be designed to enable a user to easily and efficiently develop/prototype a motion control sequence without requiring the user to perform programming, e.g., without needing to write or construct code in any programming language.

10. Claim 19.

As for claim 19, "wherein the step (B1) of adding a data display element comprises the step of: (B1 b) adding a line within a line chart", Chandhoke in Fig. 6D, 6D illustrate a line chart.

11. Claim 21.

Chandhoke in (page 1, para. 0008) teach, "wherein the step (B) of accepting user input to graphically edit the tabular data further comprises the step of: (B2) being responsive to the selection by a user of a range within a graphical display area by editing tabular data corresponding to that range", that the motion control prototyping environment may be designed to enable a user to easily and efficiently develop/prototype a motion control sequence without

requiring the user to perform programming, e.g., without needing to write or construct code in any programming language.

12. Claim 22.

As for claim 22, "wherein the step (B) of accepting user input to graphically edit the tabular data further comprises the step of: (B3) being responsive to the selection by a user of a data display element by editing tabular data corresponding to that data display element", see claim 18's rejection.

13. Claim 23.

As for claim 23, "wherein the step (B3) of accepting user input to graphically edit the tabular data further comprises the step of: (B3a) being responsive to the selection by a user of an editing function by applying the editing function to a data display element", see claim 18's rejection..

14. Claim 28.

Chandhoke in (paragraph 0155) teach the step of, "accepting graphically edited tabular data; and performing a simulation using the graphically edited tabular data".

15. Claim 29.

Chandhoke in (paragraphs 0136-0137 and 0123) teach the step of, "A computer program product for use with an interactive display system capable of receiving input signals from an input device, the computer program product comprising a computer usable medium having computer readable code thereon comprising: display code for displaying tabular data on a display as graphical a graphical image; and code for accepting user input to graphically edit the tabular data", that the user may also graphically edit the position and velocity profiles (tabular data) for the operation and view the changes caused to the property values. Chandhoke in (paragraph

0155) teach the step of, "code for performing a simulation using the graphically edited tabular data".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 6, 7, 17, 20 and 31-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Chandhoke, and further in view of Sacerdoti Us patent 6,222,540 B1.

16. Claim 3.

As for claim 3, "wherein the controller is configured to display the tabular data as a stacked bar chart", Chandhoke teaches the line chart, but dose not specifically specify the data as a stacked bar. However Sacerdoti teaches in (col. 17, lines 1-17) and Table 1 shows rules for outputting stacked vertical bars or clustered vertical bars, similar rules can be used for outputting clustered horizontal bars and stacked horizontal bars by, e.g., reversing "x" axis and "y" axis actions. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sacerdoti into Chandhoke, in order to provide a PC-based 3D graphics application which has an open architecture such that user developers of the application can alter the application to fit their needs Sacerdoti (col. 2, line 48-60).

17. Claim 6.

As for claim 6, "wherein the added data display element is a bar within a stacked bar chart",

Chandhoke does not explicitly specify a bar within a stacked bar chart, however, Sacerdoti in (col. 17, lines 7-16) and Fig. 8 teaches a bar within a stacked bar. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sacerdoti into Chandhoke in order to provide a PC-based 3D graphics application which has an open architecture such that user developers of the application can alter the application to fit their needs.

18. Claim 7.

As for claim 7, "wherein the controller is configured to permit a user to edit the tabular data by selecting a range within a graphical display area", the step is obvious because when the controller is configured to permit a user to edit the tabular data, the range should be within a graphical display area.

19. Claim 17.

As for claim 17, "wherein the step (A) of displaying graphical images representative of tabular data further comprises the step of: (A2) displaying the tabular data as a stacked bar chart", Chandhoke teaches the line chart, but dose not specifically specify the data as a stacked bar. However Sacerdoti teaches in (col. 17, lines 1-17) and Table 1 shows rules for outputting stacked vertical bars or clustered vertical bars, similar rules can be used for outputting clustered horizontal bars and stacked horizontal bars by, e.g., reversing "x" axis and "y" axis actions. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sacerdoti into Chandhoke, in order to provide a PC-based 3D graphics application which has an open architecture such that user developers of the application can alter the application to fit their needs Sacerdoti (col. 2, line 48-60).

20. Claim 20.

As for claim 20, "wherein the step (B1) of adding a data display element comprises the step of: (B1 c) adding a bar within a stacked bar chart", Chandhoke does not explicitly specify a bar within a stacked bar chart, however, Sacerdoti in (col. 17, lines 7-16) and Fig. 8 teaches a bar within a stacked bar. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sacerdoti into Chandhoke in order to provide a PC-based 3D graphics application which has an open architecture such that user developers of the application can alter the application to fit their needs.

21. Claims 31 and 33.

Chandhoke et al. hereinafter, Chandhoke in (paragraphs 0136-0137 and 0123) teach the step of, "a display device, a display controller configured to display graphical images representative of tabular data and to permit a user to graphically edit the tabular data", that the user may also graphically edit the position and velocity profiles (tabular data) for the operation and view the changes caused to the property values. Chandhoke in (page 1, para. 0008) teach the step of, "wherein the controller is configured to permit a user to edit the tabular data by selecting an editing function to be applied to the data display element", that the motion control prototyping environment may be designed to enable a user to easily and efficiently develop/prototype a motion control sequence without requiring the user to perform programming, e.g., without needing to write or construct code in any programming language. Chandhoke and Sacerdoti do not explicitly specify the step of, "representation of an equation, and the graphical representation is a line chart". And also applicant does not specify what type of an equation involves. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made

to recognize that Chandhoke in Fig. 6D illustrates a line chart, and a line graph has an equation with a constant or a variable slops. A one skill in the art could represent an equation with a line graph or vise versa. The reference Sacerdoti represents a bar graph, and the bar graph represents an equation. Therefore in order to have both bar and line graphs, Chandhoke can modify his line graph equation in respect to Sacerdoti's bar graph equation.

22. Claims 32 and 34.

Chandhoke et al. hereinafter, Chandhoke in (paragraphs 0136-0137 and 0123) teach the step of, "a display device, a display controller configured to display graphical images representative of tabular data and to permit a user to graphically edit the tabular data", that the user may also graphically edit the position and velocity profiles (tabular data) for the operation and view the changes caused to the property values. Chandhoke in (page 1, para. 0008) teach the step of, "wherein the controller is configured to permit a user to edit the tabular data by selecting an editing function to be applied to the data display element", that the motion control prototyping environment may be designed to enable a user to easily and efficiently develop/prototype a motion control sequence without requiring the user to perform programming, e.g., without needing to write or construct code in any programming language. Chandhoke teaches the line chart, but dose not specifically specify the data as a stacked bar. However Sacerdoti teaches in (col. 17, lines 1-17) and Table 1 shows rules for outputting stacked vertical bars or clustered vertical bars, similar rules can be used for outputting clustered horizontal bars and stacked horizontal bars by, e.g., reversing "x" axis and "y" axis actions.

Chandhoke and Sacerdoti do not explicitly specify the step of, "representation of an equation". And also applicant does not specify what type of an equation involves. However, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to recognize Chandhoke in Fig. 6D illustrates a line chart, and a line graph has an equation with a constant or a variable slops. A one skill in the art could represent an equation with a line graph or vise versa. The reference Sacerdoti represents a bar graph Fig. 8, and the bar graph represents an equation. Therefore in order to have both bar and line graphs, Chandhoke can modify his line graph equation in respect to Sacerdoti's bar graph equation.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

23. Claims 10, 11, 24 and 25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. An explanation of deficiency of the claims are as following:

24. Applicant in claims 10 and 24 discloses a phrase "in the form of an equation", but fails to specify what are the form of equations?

25. Applicant in claims 11, 25 and 31-34 discloses a phrase "in the form of a graphical representation of an equation", but fails to specify what is the form of a graphical representation of an equation?

Allowable Subject Matter

The combination of claims 12, 13, 26 and 27 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid Amini
July 22, 2003

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